146 262 most significant source of phosphorus, iron, thiamine, riboflavin and niacin in these diets. Although the calcium content of rice is low[1], about 23 and 16% of the estimated calcium content[2] of diets of Groups A and B respectively came from the cereal groups. Glutinous rice and various products such as noodles made of rice flour were eaten occasionally in small amounts. These and other cereals and cereal products, such as wheat bread and popcorn contributed little to the total nutritive value of the diets.

Animal products other than pork fat. - Fish and other foods of animal origin furnished about 2/5 of the protein in the diets of both groups. From 20 to 30% of the riboflavin and niacin and substantial amounts of phosphorus and iron were provided by this food group, also. For families in Group A, these animal products provided substantially more fat than the group of fats and oils as such, whereas Group B obtained about the same amount of fat from these two food groups. The estimated contribution of vitamin A from this group was small. Specific analyses for most of the varieties of fish used in Bang Chan were not available, however, hence many calculations were made on the basis of average values for "fat fish," "lean fish," and "dried fish."

Although a substantial part of the calculated calcium content of the diets came from animal products, the amounts were only about 8 and 9% of the estimated allowances for Groups A and B respectively. Fermented fish are reported to contain 1126 mg. per cent of calcium (Knudson, 1955) but the amounts eaten were relatively small. Two families only in Group A used a total of 217 grams of fermented fish on survey days, and two families in Group B used a total of 608 grams. These amounts, though they represented servings of only 20 grams per person for the two families in Group A, and of 36 grams per person for those in Group B, nevertheless increased the estimated average calcium intakes substantially, so that 43% of the calcium in diets of Group A, and 34% in diets of Group B, were provided by animal products. The tiny dried fish which are eaten whole, were not used by the families studied on any of the 44 survey days.

On the average, the contribution of animal products other than fish to the nutrient content of these diets was small.

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[256] 1. According to Knudson (1955), addition of calcium carbonate to rice during the milling process was not practiced in Thailand.

[276] 2. No attempt was made to estimate calcium intake from betel chewing, although this might be considered a dietary source of calcium. Six of 15 persons twenty years of age or older, in Group A, were betel chewers, whereas among 14 persons over twenty in Group B, 9 chewed betel regularly and one occasionally.

262 435 796 [315] Food for Homage-to-the-Teacher Rite (cont.)

Item	Amount	Cost in Baht
Fruit:		
Bananas ((3)kluaj (4)nam-(4)waa)	5 bun.	from father
Chico[2]		5.
Coconut	150	180.
Coconut (young, to make dessert)	30	30.
Job's tears	1 lit.	3.
Plums, yellow[2]		5.
Pomelos[2]		6.
Rose apples[2]		2.
Tamarind		7.50
Tomato sauce		8.
Young palm fruit[4]	7 bun.	3.
Vegetables (non leafy):		
Bamboo shoots, cooked	1 pail	28.
[272] Cucumber		--[3]
[273] Egg plants		--[3]
[274] Garlic	5 kg.	26.50
Gourd, white		1.
Onion, fragrant[5]		6.
Onion[5]	4 kg.	4.
Onion, welsh[5]		--[3]
Mushrooms		3.
Radish, white		--[3]
[354] **Vegetables (leafy green and yellow):**		
Cabbages		--[3]
Chinese kale		--[3]
Chili, green		7.50
Vegetables (leafy green & yellow) cont.:		
Lettuce		--[3]
Parsley		--[3]
Pumpkin	3 fruits	12.
Sweet basil leaves		1.
Sweet potatoes	6 kg.	6.
(3)Tang-(5)oo		--[3]
Seasonings etc.:		
Vinegar	1 bottle	1.
Fishsoy	1 jar	10.
(2)Ka-(1)chaaj	2½ kg.	12.50
Sodium glutamate		5.
Pepper		14.
Agar	400 gms.	36.
Miscellaneous:		
Cola beverage	72 bottles	72.[6]
Liquor	16 bottles	80.[6]
Ice		30.[6]
Cigarettes	2 pkgs.	--[6]
Tobacco	1 heap	--[6]
Betel pepper		9.
Fresh areca nut		10.
Dried areca nut		8.
Dried palm leaves	1 big bundle	2.
Firewood		50.
	Total	1577.75

[184]

1. For Moslem guests.
2. Food items placed on a tray and used in the ceremony proper.
3. Items so marked cost a total of 140 baht.
4. Not identified.
5. Several kinds of onions, both fresh and dried, are commonly used.
6. Prices not stated; estimate for liquor.

4:Phillips E-4,5 (1956-1957) 1966
AO7 Central Thai AO7
Bang Chan

the villagers is contrasted with those cases of separation or divorce which are viewed as resulting more from social psychological reasons: arguments, contrariness, general incompatability, and wasting or not sharing money. The squandering of money is a most frequent cause of family discord contributing to family dissolution, especially when it involves the three aphoristic evils of Thai life: women, whiskey, and opium (although, in fact, I know of only two cases where Bang Chaners have been reputed to smoke opium).

Precise figures on the divorce or separation rate in Bang Chan are unknown, primarily because many marriages as well as divorces are never registered on the government rolls; also, many separations seem to follow an on-again-off-again pattern; the sanctioned occurrence of polygyny (only eight known cases out of the 296 families) and even polyandry (two known cases) complicates the problem even further. However, the fact that *four months* after I had designated a sample of thirty families from which to select informants, six of those families, or 20 percent of the sample population, had dissolved would strongly suggest that Bang Chan families are not particularly stable.

The causes of family fission in these specific cases are unknown, but what is impressive is the apparent ease with which it takes place and the equanimity with which people seem to accept it. Other informants, reporting their own experiences or observations, discuss family breakups as if they were among the more normal events of the workaday world and completely understandable. They seem to be of no greater emotional import—in the sense of eliciting recognizable feelings of distress—than losing a good price on the sale of a piece of land or on the sale of some rice. In fact, the latter kinds of situations are considerably more likely to evoke expressions of hurt or exasperation. One repeatedly encounters in Bang Chan instances on the following order: a family breaks up simply because the husband has an inclination to work for a particular person whom he likes; a wife ("she is a touchy woman") runs away every time she has a minor disagreement with her husband (minor even by village standards, for example, "Should I buy my lottery tickets from Mr. X or Mr. Y?"; "Should we invite seven monks or ten monks to officiate at this ceremony?"). The point here is that these explanations—and the low tolerance for discord, the importance to a person of a boss or job over a spouse, the desire to be footloose, which they imply—are to the villagers completely reasonable justifications for the dissolution of family units.

Many of the family relationships referred to above as "centripetal" in nature are clearly related to or derived from patterns of social organization characteristic of an earlier Bang Chan. Although most evidence indicates that even in the years immediately following the settlement of the village in

BANG CHAN

757 in their mouths. More than half of the teeth crowned were said to have been sound, and no crowned molars were noted. The services of a dentist appear to have been sought more for their cosmetic value than for dental care as such.

276 164 Betel Chewing and Dental Health. - Betel chewing was not habitual with any of the adults under 25 years of age who were examined. Among adults above this age in the random sample, 13 of 29 men, or 45%, and 34 of 40 women, or 85% chewed betel. The group of adults from 25 to 44 years of age was singled out for study of caries incidence in relation to betel chewing, since adults retained most of their teeth up to this age. Among 19 betel chewers, 3 persons had 5 defective teeth whereas among 19 non-betel chewers, 7 persons had 46 defective teeth. Others (Gerry et al. 1952; Shourie, 1948) have reported a lower incidence of caries among betel chewers than non-chewers. Caution must be used in interpreting our observations, however, because the sample is small, and the teeth were not cleaned before counting caries. Stain and calculus may have obscured small caries in betel chewers.

The impression was gained by casual observation that protruding incisors were common among habitual betel chewers, and that the teeth of some betel chewers appeared to be loose. Since such protruding incisors were not noted among the school children, nor among non-chewers, we associated them with habitual betel chewing. Both Gerry et al.(1952) and Balendra (1949) noted a higher incidence of gingivitis among betel chewers than non-chewers. Since most of the older persons in our sample chewed betel, our data offered no clue as to the possible effect of betel chewing on the loosening and loss of teeth among older persons. Another item of possible importance, and on which we have no data, is the extent to which tobacco is used as an ingredient of the mixture which is spread on betel leaves.

276 146 Platt (1945) considered betel chewing as a potential source of calcium in the diet. He stated that the amount and utilization of calcium ingested with 6 betel leaves was similar to that from 10 ounces of cow's milk.[1]

The amount of calcium ingested in this way doubtless varies not only with the frequency of betel chewing, but also with the amount of juice swallowed. In Bang Chan, spitting out the juice appeared to be more customary than swallowing it.

276 Further research is needed to decide whether the potential disadvantages of betel chewing outweigh its potential benefits. Moreover in any attempt to decrease the practice of betel

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1. Platt, 1945. Footnote, p. 21.

BANG CHAN

chewing, the extent to which the betel leaves and areca nuts are associated with festival occasions must be taken into consideration. Betel chewing was forbidden in Thailand by the Thai government but the enforcement of this regulation proved impossible and it has been forgotten since World War II.

Nutritional Status

Incidence of Anemia. - Hemoglobin was determined by means of a Sponcer Hb-meter. About 9% of the school children had hemoglobin values below 11.5 g. per 100 ml. but one value only was below 9.75 g. (Table 8). As might be expected since none of the girls in the primary school had passed the menarche, no difference was apparent between values for boys and girls.

Table 8

Hemoglobin Values of 233 Children, Ages 7-14, in the Bang Chan Primary School, 1952-53

	Number of Children	Hemoglobin, grams per 100 ml.					
		Under 9.75	9.75-11.5	11.75-12.5	12.75-13.5	Over 13.5	Not Ascertained
Boys	121	0	10	32	44	33	2
Girls	112	1	10	25	38	37	1
Total	233	1	20	57	82	70	3

In the group of persons 15 years and older, in the random sample of village households, the usual difference in hemoglobin values between males and females is evident (Table 9). About 6% of the males and 25% of the females had hemoglobin values of 11.5 g. or less/100 ml. with one only below 9.75 g. Many of these might be considered as borderline rather than anemic.

[see p.25 - Analyst]

48

621
125
[872]

3.a. Is there anyone from your house who is now attending mattayom school?

1.	Yes	24
2.	No	309

b. Do you have any children who have not yet entered or not yet finished prathom school?

3.	Yes	201
4.	No	126
--	Unascertainable	4

c. IF YES: Do you plan to send any of these children to mattayom school or not, or is it uncertain?

5.	Plans to send	66
6.	Does not plan to send	43
7.	Unascertainable	32

[863]

4. What kind of occupation would please you the most--farming or some other occupation? If some other occupation, what other occupation would please you the most?

1.	Farmer prefers farming	166
2.	Farmer prefers other occupation	25
3.	N. from other occupation prefers his occupation	25
4.	N. from other occupation prefers farming	8
5.	N. from other occupation prefers another occupation	5
6.	Unascertainable	4

5. How is Ubans BC-KY in your opinion? Is it a very good place to live, a fairly good place to live, or not such a good place to live?

8.	Very good	71
9.	Fairly good	254
X.	Not so good	4
0.	Unascertainable	4

[276]

6.a. Do you smoke cigarettes or not?

7.	Yes	208
8.	No	118
--	No Answer	7

b. If yes: Would you say that you smoke more cigarettes than most people in BC-KY, less than most people in BC-KY, or about the same as most people in BC-KY?

9.	More	14
X.	Less	68
Y.	About the same	124
0.	Unascertainable	8

57 125

53. Which of the following six qualities do you feel is the best thing for man: Virile, friendly, educated, rich, religious, lazy? [577]

5.	To be virile	2
6.	To be friendly	31
7.	To be educated	56
8.	To be rich	43
9.	To be religious	126
X.	Not to be lazy	57
Y.	Unascertainable	15
—	No Answer	3

54. Do you drink tea frequently, occasionally, seldom, or never? [272]

1.	Often	22
2.	Occasionally	68
3.	Seldom	153
4.	Never	85

55. Do you drink whiskey frequently, occasionally, seldom, or never? [273]

5.	Often	29
6.	Occasionally	73
7.	Seldom	157
8.	Never	74
9.	Unascertainable	—

56.a. In Thailand are many people who smoke opium. Excuse me, during your life have you ever smoked opium, or not? [276]

1.	Yes	45
2.	No	287
3.	Unascertainable	1

b. IF NO: Excuse me, do you think there is anything wrong with smoking opium, or not?

4.	Yes, it is wrong	281
5.	No, it is not wrong	5
6.	Unascertainable	1

c. IF SOMETHING WRONG: What are the various reasons why you think it is wrong?

7.	Bad for health	43
8.	Habit forming	68
9.	Waste of money	220
X.		
Y.	Other reasons, specify_____	40
0.	Unascertainable	

57.a. In the last month, how many times did you go to Nikburi or didn't you go at all? [484]

0.	Did not go at all	67
1.	Once	55
2.	2 to 4 times	120
3.	5 to 9 times	39
4.	10 to 19 times	30
5.	20 times or more	30
6.	Unascertainable	8

7: Janlekha X-4,5 (1948-1953)p956 AO7 Central Thai AO7
Bangchan

On the other hand, there are scores of items that have to be bought for daily consumption. These are: (a) Food -- fish, fish sauce, shrimp paste, meat, coconut, onions, garlic, dried chili, curry essence, limes, tamarind, palm sugar, white sugar, salt, and cookies: (b) Stimulant -- dried areca, betel, lime, tobacco, tobacco binder, and liquor; (c) Clothing; (d) Medicine; (e) Soap; (f) Fuel -- Kerosine, matches, charcoal, and fire wood. The list includes only standard items appearing on our check list. Actually, there are more of such items as coffee, tea, lemonade, coca-cola, and pepsi-cola. Articles that are bought but do not appear on the check list for ordinary household expenses for certain technical reasons which will be discussed in the section on consumption later in this chapter are building materials, machinery, farm equipment, furniture and household utensils.

The Operator's Remuneration and Measures of Success

From almost the beginning of the study of farm management in the United States, much effort has been given to measuring the success of farming businesses, or of farm-family undertakings or enterprises, and then of correlating various factors with these, such as size of business, yields per acre or per animal, or work-efficiency measured perhaps as crop acres per man or per horse or per tractor, with a view to discovering some general farm management principles or rules for a farmer or farm family to follow in becoming more successful. Black, Clawson, Sayre and Wilcox give the

*243 511 and that they are consumed daily. Expense on cookies is high because of school children's daily allowances which *243 were assumed to be spent entirely on this item. Even though 857 cash is extremely scarce in the village, especially during 511 the period from July until just before harvesting time in January when roughly seven out of ten farm operating families do not have any cash at all, the children still have the privilege of receiving daily cash allowance. This is possible because of the chicken enterprise. The children simply take eggs along and convert them into cash at cooky stalls in the school yard. In this manner, it is seen that the school children have an important part in the daily flow of Bangchan eggs into Bangkok markets.

*243 The kind of tobacco commonly used in Bangchan is • 276 the relatively inexpensive native tobacco which smokers 511 make into cigarettes themselves with the use of a special kind of thatchleaf binder. Bangchan women do not smoke, but they use tobacco heavily while they chew betel. Most men, young and old, are in the habit of smoking, while chewing betel is now limited to elderly people of both sexes. Tobacco is thus rated among major items of expenses because it is used in smoking as well as betel chewing.

*243 Obviously, clothing is one of the major items of 291 expenses. In fact, it is the highest item after food, 511 averaging 556 baht per family annually. Since rice farmers work partially under water most of the time, the rate of wear and tear of clothing is rather high. Each family worker

182
184
511 c. The family's purchasing power. Certain goods considered as luxuries -- medicine, eggs, pork and beef, and white sugar -- were not consumed by poor families.

184
• 276 d. Individual taste and preference. The Moslems would not consume any pork although they had enough money
261 to buy it. Some poor farmers spent more money on curry
182 essence than their more affluent neighbors because they
511 preferred highly flavored dishes, and some tobacco smokers did not spend a cent on tobacco binder because they preferred the home-grown banana leaf binder to the thatch leaf binder which had to be purchased.

182 e. Producing ability of the family. It was observed
511 that those who caught more fish tended to consume more fish
[184] regardless of their financial conditions.

f. Health affected the consumption of medicine.

[431] g. Prestige affected the amount of cash contributions
[476] to neighbors.
[554]

h. Personal habits -- thrift, fun loving, indulgence, like or dislike of liquor -- affected the amount of personal expense.

i. Presence or absence of children of school age in the family affected the consumption of cookies.

Special Expenses

511 By special expenses we mean major items of expenses which do not occur regularly but which may arise in one time or another. Examples: purchases of land, gold and